

REMARKS

Claims 1-20 are pending. By this Amendment, the specification, abstract and claims 1-10 are amended. In addition, claims 11-20 are added.

The attached Appendix includes a marked-up copy of the rewritten abstract (37 C.F.R. §1.121(b)(iii)), of the substitute specification (37 C.F.R. §1.125(b)(2)) and each claim (37 C.F.R. §1.121(c)(1)(ii)).

It is respectfully requested that the amendments be entered prior to taking the application up for examination. Should the Examiner have any questions, he is respectfully requested to contact the undersigned at the telephone number listed below.

Respectfully submitted,


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Attachments:

Substitute Abstract
Appendix
Request for Approval of Drawing Corrections
Marked-up Specification
Substitute Specification

Date: January 18, 2002

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APPENDIX

Changes to Abstract:

The following is a marked-up version of the amended Abstract:

~~When providing a~~ A rotation detecting device which detects the rotational state of a rotary shaft, ~~it is constructed~~ structured to be a device in which the number of parts is small, and the incorporation is simple. The ~~construction~~ structure is ~~made~~ such that a long holder receiving part (10) is formed on the channel back side in an opening part (7b) of a motor shaft case body (7) of a casing (6) which contains a reduction mechanism part, and a sensor holder (12) in which a hall device, (14) ~~to be~~ the rotation detecting device, is incorporated, is slid in the longitudinal direction of the motor shaft, and is incorporated in the holder receiving part (10) in the lightly pressed state, similarly to the incorporation of the motor shaft (4).

Changes to Specification:

Attached is a marked-up copy of the specification.

Changes to Claims:

Claims 11-20 are added.

The following are marked-up versions of the amended claims:

1. (Amended) A motor with a rotation detecting device, comprising:

_____ -a rotary shaft;

_____ -a casing with a bottomed cylindrical part for rotatably containing said rotary

shaft; and

_____ -a rotation detecting device which detects rotation of said rotary shaft,

~~characterized in that said~~ wherein the rotation detecting device is supported by a sensor holder, and ~~said the~~ sensor holder is disposed in the casing by incorporation from ~~the~~ an incorporating direction to the cylindrical part ~~offor~~ the rotary shaft.

2. (Amended) The motor with a rotation detecting device according to claim 1, ~~characterized in that~~ further comprising a holder receiving part is-formed on the inner peripheral surface of the cylindrical part of the casing, and the sensor holder is incorporated in said holder receiving part in ~~the~~ a state of temporary holding.

3. (Amended) The motor with a rotation detecting device according to claim 1-~~or 2~~, ~~characterized in that~~ further comprising:

_____ a sensor support part in which the rotation detecting device is incorporated and a terminal support part in which a connecting terminal thereof is incorporated, respectively ~~are~~-formed in the sensor holder; and

_____ -a connecting opening part, ~~for enabling~~ seeing the terminal support part from the outside, is-formed on the outer peripheral surface of the cylindrical part of the casing.

4. (Amended) The motor with a rotation detecting device according to claim 1, ~~2, or 3~~, ~~characterized in that~~ further comprising a brush unit in which a brush is incorporated is fixed on the opening side of the cylindrical part of the casing and the sensor holder in the casing is positioned and supported by the casing on the basis of fixing ~~to the casing of the~~ brush unit to the casing.

5. (Amended) The motor with a rotation detecting device according to claim 3-~~or 4~~, ~~characterized by being constructed such that~~ further comprising a brush connecting terminal ~~which is incorporated in the~~ brush unit is ~~extended long to~~ to extend onto and be supported by the terminal support part of the sensor holder, and ~~is~~ can be seen from the connecting opening part of the casing.

6. (Amended) The motor with a rotation detecting device according to claim 3, ~~4, or 5~~, ~~characterized in that~~ further comprising at least one projecting piece part which projects toward the outside diameter side is-formed in the connecting opening part of the casing.

7. (Amended) The motor with a rotation detecting device according to claim 6, ~~characterized in that~~ further comprising an external pull-out terminal unit which is electrically connected to each of connecting terminals of the rotation detecting device and the brush and is incorporated into the connecting opening part from the outside diameter side of the cylindrical part.

8. (Amended) The motor with a rotation detecting device according to claim 2, 3, 5, 6, or 7, ~~characterized by being constructed such that the~~ further comprising a terminal of the ~~terminal support part~~ that is supported in the state of projecting in the outside diameter direction of the cylindrical part, and a support piece part ~~on the channel back side which~~ supports the terminal support part of the sensor holder is formed on the holder receiving part on the bottom side of the cylindrical part, and an incorporation load at the time of incorporating the external pull-out terminal unit to the terminal support part is received by the support piece part.

9. (Amended) The motor with a rotation detecting device according to claim 6, 7, or 8, ~~characterized by being constructed such that~~ further comprising at least one engaging claw ~~is formed on the incorporating tip side in the external pull-out terminal unit, and said~~ engaging claw is engaged with a step-like engagement receiving part which is formed to the connecting opening part when the external pull-out terminal unit is incorporated in the connecting opening part.

10. (Amended) The motor with a rotation detecting device according to claim 9, ~~characterized in that~~ wherein the engagement receiving part is formed integrally when the cylindrical part is molded.